

AMENDMENT UNDER 37 C.F.R. § 1.111
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cont
optical isomer I with which said biological material is reacted is present in a mixture with optical isomer II.

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4. (twice amended) The method according to Claim 10, 11 or 12, wherein said

biological material is a whole cell.

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9. (amended) The method according to Claim 13, 14 or 15, wherein said optical

isomer I is a D-form and said optical isomer II is a L-form.

Please add the following new claims.

Sub C1
10. (new) A method for producing from an optical isomer I of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, an optical isomer II, said method comprising reacting a biological material which has an ability of converting said optical isomer I to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said optical isomer I, wherein said biological material is one obtained from a microorganism belonging to the genus *Arthrobacter*, *Klebsiella*, *Nocardia*, *Rhizobium*, *Saccharopolyspora* or *Streptomyces*.

11. (new) A method for producing from an optical isomer I of an amino acid represented by Formula (I):

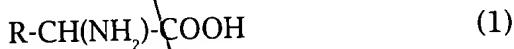


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wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, an optical isomer II, said method comprising reacting a biological material which has an ability of converting said optical isomer I to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said optical isomer I, wherein said biological material is one obtained from a microorganism classified to *Arthrobacter pascens*, *Flavimonas oryzihabitans*, *Klebsiella planticola*, *Nocardia diaphanozonaria*, *Pseudomonas chlororaphis*, *Pseudomonas oleovorans*, *Pseudomonas oxalaticus*, *Pseudomonas taetrolens*, *Rhizobium meliloti*, *Saccharopolyspora hirsuta* or *Streptomyces roseus*.

Sub C1

12. (new) A method for producing from an optical isomer I of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, an optical isomer II, said method comprising reacting a biological material which has an ability of converting said optical isomer I to said optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said optical isomer I, wherein said biological material is one obtained from

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Arthrobacter pascens strain IFO12139, *Flavimonas oryzihabitans* strain JCM2952, *Klebsiella planticola* strain JCM7251, *Nocardia diaphanozonaria* strain JCM3208, *Pseudomonas chlororaphis* strain IFO3521, *Pseudomonas oleovorans* strain IFO13583, *Pseudomonas oxalaticus* strain IFO13593, *Pseudomonas taetrolens* strain IFO3460, *Rhizobium meliloti* strain IFO14782, *Saccharopolyspora hirsuta* subsp.*kobensis* strain JCM9109 or *Streptomyces roseus* strain IFO12818.

13. (new) A method for improving the optical purity of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material which has an ability of converting an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said amino acid represented by Formula (I), wherein said biological material is one obtained from a microorganism belonging to the genus *Arthrobacter*, *Klebsiella*, *Nocardia*, *Rhizobium*, *Saccharopolyspora* or *Streptomyces*.

14. (new) A method for improving the optical purity of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally

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substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material which has an ability of converting an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said amino acid represented by Formula (I), wherein said biological material is one obtained from a microorganism classified to *Arthrobacter pascens*, *Flavimonas oryzihabitans*, *Klebsiella planticola*, *Nocardia diaphanozonaria*, *Pseudomonas chlororaphis*, *Pseudomonas oleovorans*, *Pseudomonas oxalaticus*, *Pseudomonas taetrolens*, *Rhizobium meliloti*, *Saccharopolyspora hirsuta* or *Streptomyces roseus*.

15. (new) A method for improving the optical purity of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material which has an ability of converting an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said amino acid represented by Formula (I), wherein said biological material is one obtained from *Arthrobacter pascens* strain IFO12139, *Flavimonas oryzihabitans* strain

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JCM2952, *Klebsiella planticola* strain JCM7251, *Nocardia diaphanozonaria* strain JCM3208, *Pseudomonas chlororaphis* strain IFO3521, *Pseudomonas oleovorans* strain IFO13583, *Pseudomonas oxalaticus* strain IFO13593, *Pseudomonas taetrolens* strain IFO3460, *Rhizobium meliloti* strain IFO14782, *Saccharopolyspora hirsuta* subsp. *kobensis* strain JCM9109 or *Streptomyces roseus* strain IFO12818.

16. (new) A method for producing from an optical isomer I of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material which has an ability of converting an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with a racemic mixture of said optical isomers I and II.

17. (new) A method for producing from an optical isomer I of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material which has an ability of converting an optical isomer I of said amino acid to an optical active isomer II, the

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isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with said optical isomer I.

18. (new) A method for producing an optically active amino acid having increased optical purity with respect to an optical isomer II of an amino acid represented by Formula (I):



wherein R is an optionally substituted C1-C12 alkyl group, an optionally substituted C4-C8 cycloalkyl group or an optionally substituted C6-C14 aryl group, said method comprising reacting a biological material which has an ability of converting an optical isomer I of said amino acid to an optical isomer II, the isomerism being on the basis of an asymmetric carbon atom to which both of an amino group and a carboxyl group are bound and said ability being not inhibited seriously by an amino acid transferase inhibitor β -chloro-D-alanine, β -chloro-L-alanine or gabaculine, with a racemic mixture of said optical isomers I and II, wherein the mixture is not a racemic mixture.

19. (new) The method according to Claim 16, 17 or 18, wherein said optical isomer I is a D-form and said optical isomer II is a L-form.

20. (new) The method according to claim 16, 17 or 18, wherein said biological material is one obtained from a microorganism belonging to the genus *Arthrobacter*, *Klebsiella*, *Nocardia*, *Rhizobium*, *Saccharopolyspora* or *Streptomyces*.

21. (new) The method according to claim 16, 17 or 18, wherein said biological

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material is one obtained from a microorganism classified to *Arthrobacter pascens*, *Flavimonas oryzihabitans*, *Klebsiella planticola*, *Nocardia diaphanozonaria*, *Pseudomonas chlororaphis*, *Pseudomonas oleovorans*, *Pseudomonas oxalaticus*, *Pseudomonas taetrolens*, *Rhizobium meliloti*, *Saccharopolyspora hirsuta* or *Streptomyces roseus*.

22. (new) The method according to claim 16, 17 or 18, wherein said biological material is one obtained from *Arthrobacter pascens* strain IFO12139, *Flavimonas oryzihabitans* strain JCM2952, *Klebsiella planticola* strain JCM7251, *Nocardia diaphanozonaria* strain JCM3208, *Pseudomonas chlororaphis* strain IFO3521, *Pseudomonas oleovorans* strain IFO13583, *Pseudomonas oxalaticus* strain IFO13593, *Pseudomonas taetrolens* strain IFO3460, *Rhizobium meliloti* strain IFO14782, *Saccharopolyspora hirsuta* subsp.*kobensis* strain JCM9109 or *Streptomyces roseus* strain IFO12818.

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